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Complete if Known Substitute for form 1449/PTO Application Number Filing Date 9/15/2003 INFORMATION DISCLOSURE First Named Inventor STEVEN R. SMITH STATEMENT BY APPLICANT Art Unil (Use as many sheets as necessary) Examiner Name Attorney Docket Number 99-0866.3

of 4 Sheet 1

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cile No '	Document Number  Number-Kind Code <sup>2 (5' Angust)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
per.	Α	US- 3,706,840	12/19/1972	Moyle et al.	
7	В	<sup>US-</sup> 3,721,868	03/20/1973	Smith, Jr.	
	С	US- 3,778,685	12/11/1973	Kennedy	
1	D	US- 4,026,008	05/31/1977	Drees	
	E	us- 4,250,347	02/10/1981	Fierkens	
	F	US- 4,540,603	09/10/1975	Hidaka et al.	
_	G	US- 4,994,411	02/19/1991	Naito	
	Н	US- 5,057,457	10/15/1991	Miyahara et al.	
	1	US- 5,097,317	03/17/1992	Fujimoto et al.	
	J	US- 5,147,815	09/15/1992	Casto	<u> </u>
	К	US- 5,197,183	03/30/1993	Chia et al.	
	L	<sup>US-</sup> 5,206,794	04/27/1993	Long	
	М	us- 5,291,059	03/01/1994	Ishisuka et al.	
	N	US- 5,365,107	11/15/1994	Kuraishi et al.	
	0	us. 5,437,,915	08/01/1995	Nishimura et al.	
	P	US- 5,442,231	08/15/1995	Miyamoto et al.	
	Q	<sup>US-</sup> 5,619,065	04/08 / 1997	Kim	
$-\!\!\!/$	R	US- 5,637,915	06/10/1997	Sato et al.	
ser	S	US- 5,638,596	06/17/1997	McCormick	

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	30030mis to 1000 14430 10	Application Number				
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	INFORMATION DISCLOSURE	First Named Inventor	STEVEN R. SMITH			
	STATEMENT BY APPLICANT	Art Unit				
	(Use as many sheets as necessary)	Examiner Name				
_	Sheet 2 of 4	Attorney Docket Number	99-0866.3			
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			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (F Annual)	<del> </del>		<del></del>
per	T	<sup>US-</sup> 5,659,198	08/19/1997	Okumoto et al.	
	U	<sup>US-</sup> 5,674,785	10/07/1977	Akram et al.	
	V	<sup>US-</sup> 5,739,585	04/14/1998	Akram et al.	
$-t^-$	W	US- 5,750,423	05/12/1998	Ishii	
	Х	<sup>US-</sup> 5,767,570	06/16/1998	Rostoker	<u> </u>
_	Y	US- 5,770,479	06/23/1998	Brooks et al.	
	Z	US- 5,793,118	08/11/1998	Nakajima	
_	AA	US- 5,689,355	02/09/1999	Fukaya	
	AB	<sup>US-</sup> 5,920,114	07/06/1999	Beaumont	
1	AC	US- 5,970,320	10/19/1999	Yamasaki et al.	
	AD	US- 5,970,322	10/19/1999	Ichikawa et al.	<u> </u>
1	AE	<sup>US-</sup> 5,989,940	11/23/1999	Nakajima	_
1	AF	<sup>US-</sup> 5,981,315	11/09/1999	Murakami et al.	
	AG	us- 5,998,866	12/07/1999	Ochi et al.	
	AH	us- 6,025,212	02/15/2000	VanNortwick et al.	
	Al	us- 6,028,368	02/22/2000	Abe	
	AJ	<sup>US-</sup> RE36,613	03/14/2000	Ball	
	AK	<sup>US-</sup> 6,043,430	03/28/2000	Chun	
per	AL	<sup>US-</sup> 6,048,755	04/11/2000	Jiang et al.	

		FORE	IGN PATENT DOCU	MENTS	T	
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INFORMATION DISCLOSURE	First Named Inventor	STEVEN R. SMITH		
STATEMENT BY APPLICANT	Art Unit			
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Sheet 3 of 4	Attorney Docket Number	99-0866.3		

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000	AM	Number-Kind Code <sup>2</sup> (/ brown) US- 6,063,139	05/16/2000	Fukaya	<del></del>
MI	ļ	0,003,133		Test	1
	AO	<sup>US-</sup> 6,068,180	05/30/2000		
- 1	AP	us- 6,091,157	07/18/2000	Black et al.	
	AQ	<sup>US-</sup> 6,153,924	11/28/2000	Kinsman	
	AR	<sup>US-</sup> 6,229,202B1	05/08/2001	Corisis	
	AS	US- 6,285,624B1	07/10/2001	Corisis	
	AT	US- 6,271,056B1	08/07/2001	Farnworth et al.	
<del></del>	AU	us- 6,281,044B1	08/28/2001	VanNortwick	
per	AV	<sup>US-</sup> 4,788,583	11/29/1988	Kawahara et al.	
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STATEMENT BY APPLICANT				First Named Inventor	STEVEN R. SMITH		
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Sheet 4		١٥	4	Attorney Docket Number	99-0866.3		

		NON PATENT LITERATURE DOCUMENTS	
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	AW	Book of Semi Standards 1995, Packaging Volume, Specification Dimensions and Tolerances Used to Manufacture Plastic Molded Small Outline Package Tooling, SEMI 1985 pgs 175-178.	
	АХ	"Analysis of Warpage of LSI package". Copyright Nitto Denko, 1999.	
	AY	LEE CHOON KUAN et al. "IC Package Warpage - Prediction and Control", TI Singapore MOS Memory Package Development Dept., date unknown.	
	AZ	1994 Dram Data Book, Micron Semiconductor, Inc., Packaging Plastic TSOP, pgs 7-19, 1994.	

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